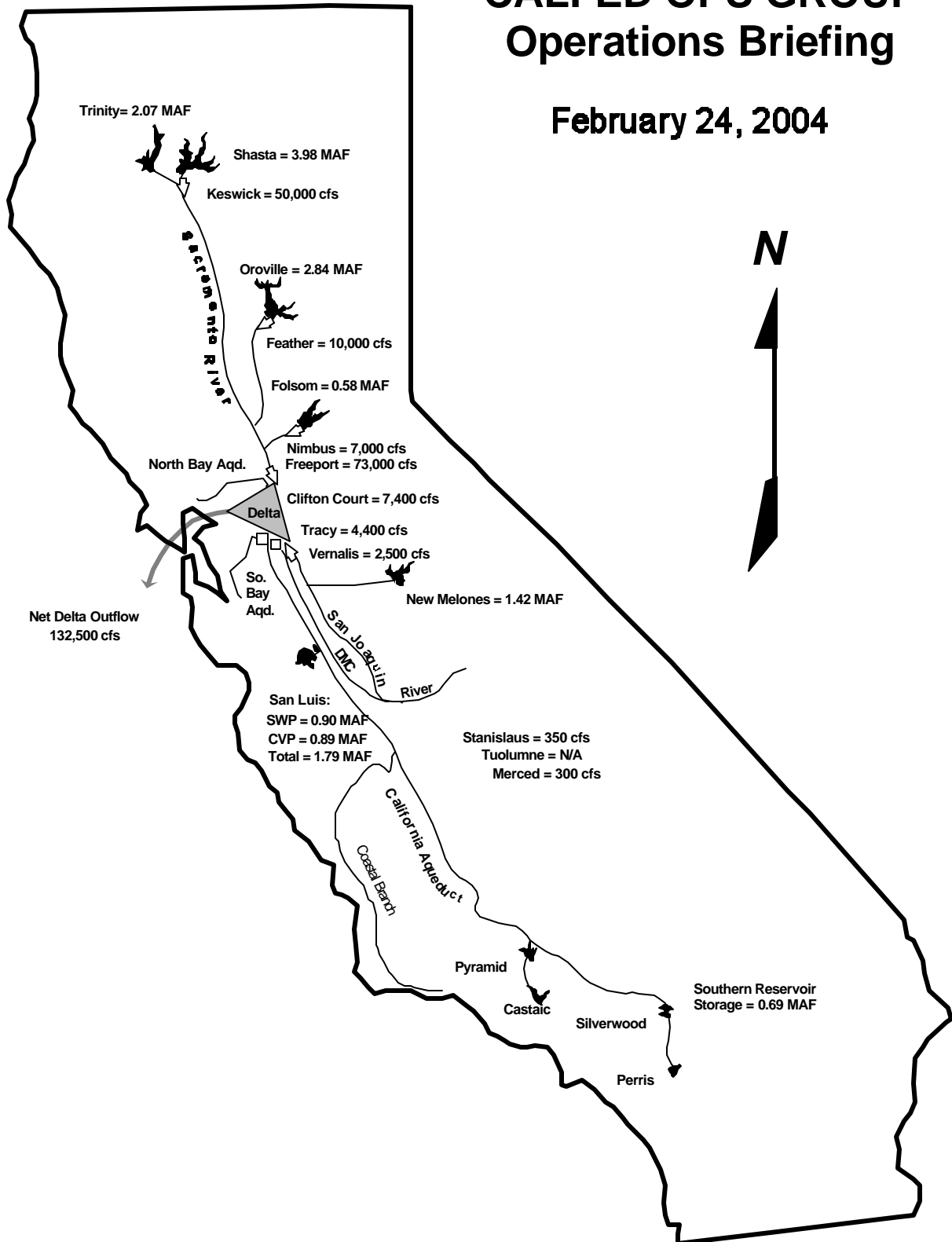


CALFED OPS GROUP Operations Briefing

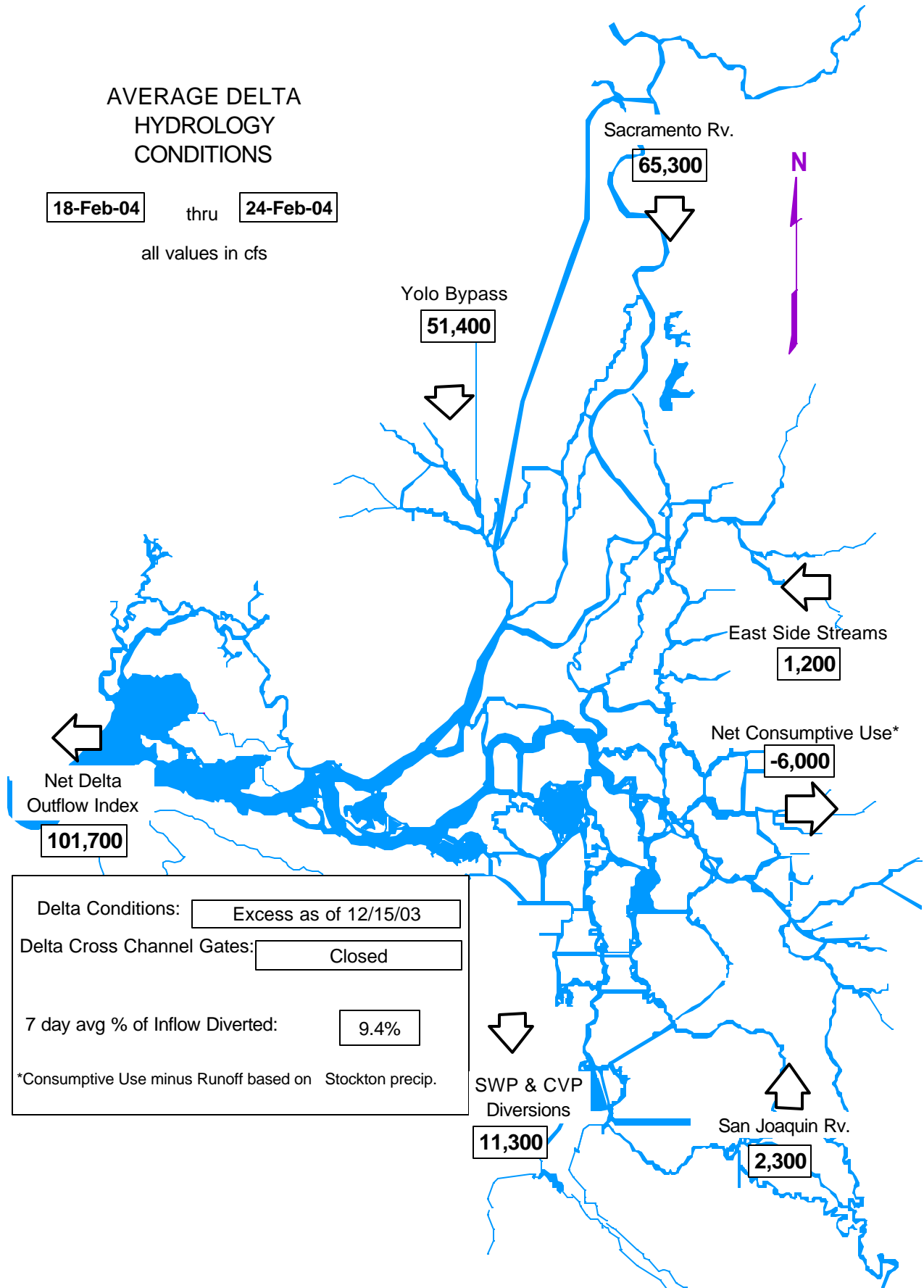
February 24, 2004



AVERAGE DELTA
HYDROLOGY
CONDITIONS

18-Feb-04 thru 24-Feb-04

all values in cfs



AVERAGE DELTA
WATER QUALITY
CONDITIONS

18-Feb-04 thru 24-Feb-04

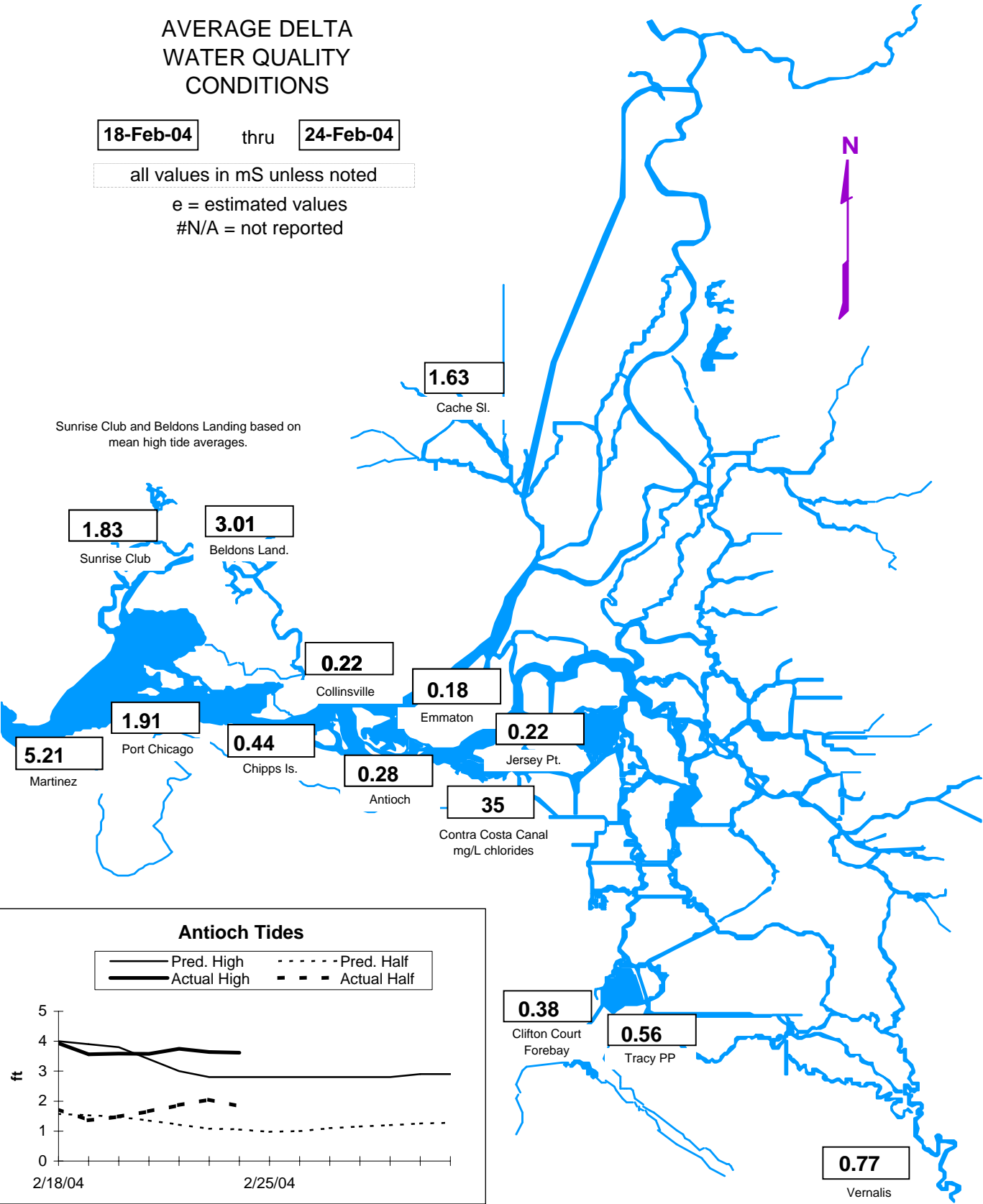
all values in mS unless noted

e = estimated values

#N/A = not reported

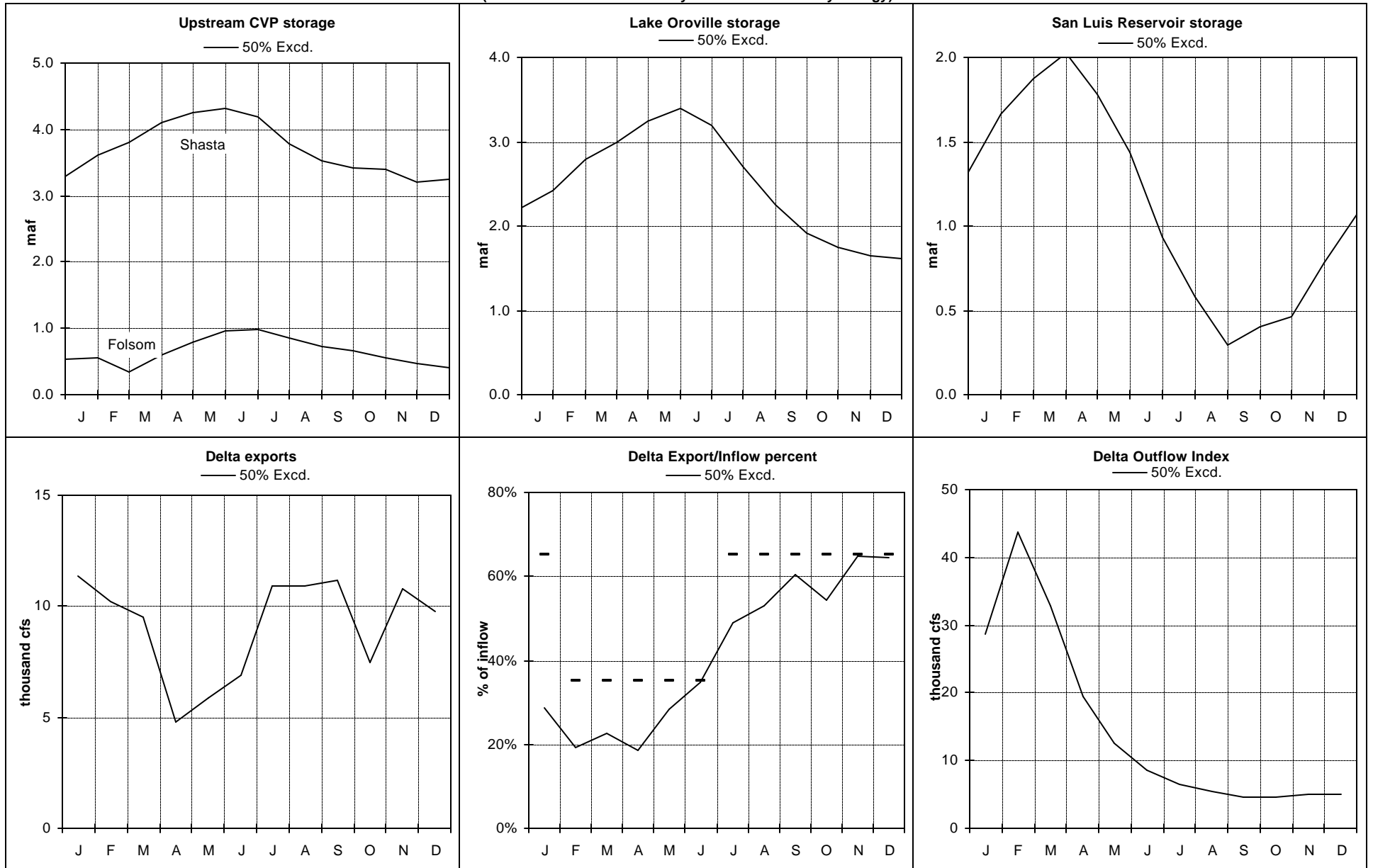


Sunrise Club and Beldons Landing based on
mean high tide averages.



SWP & CVP CY 2004 Forecasted Operations

(based on 2/1/04 snow survey and historical fall hydrology)



Flows are monthly averages.

DRAFT

Bay-Delta Standards

Contained in D-1641

DRAFT

CRITERIA	Feb 2004	Mar 2004	Apr 2004
FLOW/OPERATIONAL			
• Fish and Wildlife SWP/CVP Export Limits Export/Inflow Ratio Minimum Outflow - mon. - 7 day avg. Striped Bass Survival Habitat Protection Outflow, X2 River Flows: @ Rio Vista - min. mon. avg. - 7 day average @ Vernalis: Base -min. mon. avg. - 7 day average Pulse objective Delta Cross Channel Gates			1,500 cfs or 100% of 3-day avg. Vernalis flow
	35%	35%	35%
	Port Chicago for 28 days	7,100 - 29,200 cfs or X2 days (through June)	
	2280 cfs	2280 cfs	2280 cfs
	1824 cfs	1824 cfs	1824 cfs
			5480 cfs
	Closed		
	WATER QUALITY STANDARDS		
• Municipal and Industrial All Export Locations Contra Costa Canal			
	CI <= 250 mg/l		
	CI <= 150 mg/l for 175, days for Bleow Normal Year Type		
• Agriculture Western/Interior Delta Southern Delta			max.14-day average EC 0.45 mS/cm
	30 day running avg. EC <= 1.0 mS/cm		30 day running avg. EC <= 0.7 mS/cm
• Fish and Wildlife San Joaquin River Salinity Suisun Marsh Salinity			14-day avg.; 0.44 EC
	8.0 mhtEC	8.0 mhtEC	11.0 mhtEC

Water Year Classification: Below Normal (Based on forecast, 2/1/2004)

SRI (40-30-30 @ 50%) = 7.7 MAF

SJV (60-20-20 @ 75%) = 2.3 MAF

WY 2003/2004 EWA Accounting Summary
Based upon February Operations Study - 50% Exceedance Hydrology

Assumptions: SWP Allocation - 90%; NOD Purchases - 75 TAF; SOD Purchases - 160 TAF; MWD SS - 100 TAF

1	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
NOD (Oroville) ⁰																	0
NOD (YCWA/PCWA)										75		-25	-25	-25			0
SOD (KCWA/SCVWD)									160	-45	-75	-40					0
SOD (MWD)																	0

EWA Asset Acquisition in SWP San Luis ¹																	
2	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
E/I Relaxation																	0
EWA share of SWP gain																	0
Project Pumping to reduce EWA debt																	0
JPOD using excess flows																	0
JPOD using NOD storage																	0
Xfer NOD - Sacramento River ²												20 ^{3 4}	20 ^{3 4}	20 ^{3 4}			60
Xfer NOD - San Joaquin River ²																	0
SOD SWP Surface/GW Purchases										45 ⁵	45 ⁵	40 ⁵					130
Exchange of EWA assets																	0
Groundwater pumping SOD																	0
Exchange from CVP to SWP in SL																	0
Total Monthly EWA Assets		0	0	0	0	0	0	0	0	45	45	60	20	20	0	0	190

EWA Asset Acquisition in CVP San Luis																	
3	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
E/I Relaxation																	0
Project Pumping to reduce EWA debt																	0
JPOD using excess flows																	0
JPOD using NOD storage																	0
Xfer NOD - Sacramento River ²																	0
Xfer NOD - San Joaquin River ²																	0
SOD CVP Surface/GW purchases											30 ⁵						30
Exchange of EWA assets																	0
Groundwater pumping																	0
Exchange from SWP to CVP in SL																	0
Total Monthly EWA Assets		0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	30

EWA Expenditures at the Export Pumps																	
4	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP export cuts						-50	-50	-18	-114	-50							-282
CVP export cuts									-24								-24
Total Expenditures		0	0	0	0	-50	-50	-18	-138	-50	0	0	0	0	0	0	-306

EWA End-of-Month Incremental Storage Changes																	
5	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP in SL (without Source Shift)		0	0	0	0	-50	-50	-18	-114	-5	45	60	20	20	0	0	-92
CVP in SL		0	0	0	0	0	0	0	-24	0	30	0	0	0	0	0	6
NOD Storage		0	0	0	0	0	0	0	0	75	0	-25	-25	-25	0	0	0
SOD Storage (non-S.L.)		0	0	0	0	0	0	0	160	-45	-75	-40	0	0	0	0	0
Total Incremental Storage Changes		0	0	0	0	-50	-50	-18	22	25	0	-5	-5	-5	0	0	-86

EWA End-of-Month Storage Balance at Various Sites																	
6	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP in SL (without Source Shift)		0	0	0	0	-50	-100	-118	-232	-237	-192	-132	-112	-92	-92	-92	
CVP SL		0	0	0	0	0	0	0	-24	-24	6	6	6	6	6	6	
NOD Storage		0	0	0	0	0	0	0	0	75	75	50	25	0	0	0	
SOD Storage (non-S.L.)		0	0	0	0	0	0	0	160	115	40	0	0	0	0	0	
EWA Asset Balance		0	0	0	0	-50	-100	-118	-96	-71	-71	-76	-81	-86	-86	-86	

San Luis Reservoir Storage Conditions																	
7	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Total Storage (base case) ⁶		650	788	1010	1664	1826	2008	1748	1303	778	488	282	368	401	729	1032	
Encroachment																	
Total Storage (EWA case)		650	788	1010	1664	1776	1908	1630	1047	517	302	156	262	315	643	946	
MWD Source Shifting									25	25	25	25	-25	-25	-25	-25	
Storage (with MWD source shifting)		650	788	1010	1664	1776	1908	1630	1072	567	377	256	337	365	668	946	

⁰ 2004 NOD Purchases = 65(YCWA) + 10(PCWA). YCWA has firm 65 taf; can exercise options for an additional 120 taf. PCWA has firm 10 taf; can exercise options for an additional 10 taf.

¹ Aqueduct conveyance and evaporation losses are not included.

² Carriage water loss applies to water transfers from the Sacramento River; a 10% conveyance loss applies to water transfers from the San Joaquin River.

Carriage water loss in WY 2003 was 0%.

³ 2004 YCWA Transfer (Joint place of use) ⁴ 2004 PCWA Transfer

⁵ 2004 SOD Transfers - 130 TAF from KCWA (SWP Place of use) and 30 TAF from SCVWD (CVP Place of use)

⁶ Based upon the 2/2004 DWR's 50% (75% Fall) allocation study and the USBR'S February "50% Forecast - B2 with JPOD" study

WY 2003/2004 EWA Accounting Summary
Based upon February Operations Study - 90% Exceedance Hydrology

Assumptions: SWP Allocation - 50%; NOD Purchases - 132.5 TAF; SOD Purchases - 115 TAF

1	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
NOD (Oroville) ⁰																	0
NOD (YCWA/PCWA)										133		-66	-66				0
SOD (KCWA/SCVWD)									115	-30	-60	-25					0
SOD (MWD)																	0

EWA Asset Acquisition in SWP San Luis ¹																	
2	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
E/I Relaxation																	0
EWA share of SWP gain																	0
Project Pumping to reduce EWA debt																	0
JPOD using excess flows																	0
JPOD using NOD storage																	0
Xfer NOD - Sacramento River ²												53 ^{3 4}	53 ^{3 4}				106
Xfer NOD - San Joaquin River ²																	0
SOD SWP Surface/GW Purchases										30 ⁵	30 ⁵	25 ⁵					85
Exchange of EWA assets																	0
Groundwater pumping SOD																	0
Exchange from CVP to SWP in SL																	0
Total Monthly EWA Assets		0	0	0	0	0	0	0	0	30	30	78	53	0	0	0	191

EWA Asset Acquisition in CVP San Luis																	
3	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
E/I Relaxation																	0
Project Pumping to reduce EWA debt																	0
JPOD using excess flows																	0
JPOD using NOD storage																	0
Xfer NOD - Sacramento River ²																	0
Xfer NOD - San Joaquin River ²																	0
SOD CVP Surface/GW purchases											30 ⁵						30
Exchange of EWA assets																	0
Groundwater pumping																	0
Exchange from SWP to CVP in SL																	0
Total Monthly EWA Assets		0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	30

EWA Expenditures at the Export Pumps																	
4	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP export cuts						-50	-50		-41	-50							-191
CVP export cuts									-31								-31
Total Expenditures		0	0	0	0	-50	-50	0	-72	-50	0	0	0	0	0	0	-222

EWA End-of-Month Incremental Storage Changes																	
5	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP in SL (without Source Shift)		0	0	0	0	-50	-50	0	-41	-20	30	78	53	0	0	0	0
CVP in SL		0	0	0	0	0	0	0	-31	0	30	0	0	0	0	0	-1
NOD Storage		0	0	0	0	0	0	0	0	133	0	-66	-66	0	0	0	0
SOD Storage (non-S.L.)		0	0	0	0	0	0	0	115	-30	-60	-25	0	0	0	0	0
Total Incremental Storage Changes		0	0	0	0	-50	-50	0	43	83	0	-13	-13	0	0	0	-1

EWA End-of-Month Storage Balance at Various Sites																	
6	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
SWP in SL (without Source Shift)		0	0	0	0	-50	-100	-100	-141	-161	-131	-53	0	0	0	0	
CVP SL		0	0	0	0	0	0	0	-31	-31	-1	-1	-1	-1	-1	-1	
NOD Storage		0	0	0	0	0	0	0	0	133	133	66	0	0	0	0	
SOD Storage (non-S.L.)		0	0	0	0	0	0	0	115	85	25	0	0	0	0	0	
EWA Asset Balance		0	0	0	0	-50	-100	-100	-57	26	26	12	-1	-1	-1	-1	

San Luis Reservoir Storage Conditions																	
7	C/O	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Total Storage (base case) ⁶		650	788	1010	1664	1864	1984	1878	1420	926	590	295	184	216	369	694	
Encroachment																	
Total Storage (EWA case)		650	788	1010	1664	1814	1884	1778	1248	734	458	241	183	215	368	693	
MWD Source Shifting																	
Storage (with MWD source shifting)		650	788	1010	1664	1814	1884	1778	1248	734	458	241	183	215	368	693	

⁰ 2004 NOD Purchases = 65(YCWA) + 10(PCWA). YCWA has firm 65 taf; can exercise options for an additional 120 taf. PCWA has firm 10 taf; can exercise options for an additional 10 taf.

¹ Aqueduct conveyance and evaporation losses are not included.

² Carriage water loss applies to water transfers from the Sacramento River; a 10% conveyance loss applies to water transfers from the San Joaquin River.

Carriage water loss in WY 2003 was 0%.

³ 2004 YCWA Transfer (Joint place of use)

⁴ 2004 PCWA Transfer

⁵ 2004 SOD Transfers - 85 TAF from KCWA (SWP Place of use) and 30 TAF from SCVWD (CVP Place of use)

⁶ Based upon the 2/2004 DWR's 90% (75% Fall) allocation study and the USBR's February '90% Forecast - B2 with JPOD* study